

R E M A R K S

Reconsideration of this application, as amended, is respectfully requested.

ALLOWABLE SUBJECT MATTER

The Examiner's allowance of claims 19-23 and the Examiner's indication of the allowability of the subject matter of claims 2 and 4-11 are respectfully acknowledged.

Claims 2 and 4-11, however, have not been rewritten in independent form at this time since, as set forth in detail hereinbelow, it is respectfully submitted that their parent claim 1 also recites allowable subject matter.

THE CLAIMS

Claims 1 and 17 have been amended to more clearly recite the distinguishing features of the present invention in accordance with the requirements of 35 USC 112. In particular, claim 1 has been amended to clarify that the by-product elimination device recited therein comprises both a fuel pack and a power generation module. And claim 17 has been amended to clarify that the by-product elimination device recited therein comprises (i) a path from said power generation module used for feeding the first gas fed from said reforming portion to said fuel pack, and (ii) a path from said fuel pack used for feeding the second gas fed from

said absorbent charged portion to said power generation module. With respect to claim 17, moreover, it is respectfully pointed out that as recited in clarified amended claim 1 the absorbent charged portion is in the fuel pack and receives the first gas from the reforming portion.

In addition, claims 1-4, 6, 12-14 and 16-18 have each been amended to make minor grammatical improvements and/or to correct minor antecedent basis problems so as to place the claims in better form for issuance in a U.S. patent.

Still further, claim 24 has been added to recite the feature of the present invention whereby a by-product elimination device adapted to be used in a power generation system is provided which comprises a fuel pack and a power generation module and an absorbent charged portion in the fuel pack, which selectively absorbs carbon dioxide received from the power generation module.

No new matter has been added, and it is respectfully requested that the amendments to the claims and the addition of claim 24 be approved and entered.

CLAIM FEE

The application was originally filed with 23 claims of which 4 were independent. The application now contains 24 claims, of which 5 are independent. Accordingly, a claim fee in the amount of \$104.00 for the addition of 1 extra independent

claim and 1 extra claim in total is attached hereto. In addition, authorization is hereby given to charge any additional fees which may be determined to be required to Account No. 06-1378.

THE PRIOR ART REJECTION

Claims 1 and 3 were rejected under 35 USC 102 as being anticipated by USP 4,597,363 ("Emelock") and claim 1 was also rejected under 35 USC 102 as being anticipated by JP 09-204,925 ("Matsushita"). In addition, claims 12-14 were rejected under 35 USC 103 as being obvious in view of the combination of Matsushita and USP 6,376,112 ("Clingerman et al"), and claims 15 and 16 were rejected under 35 USC 103 as being obvious in view of the combination of either Emelock or Matsushita with USP 5,723,229 ("Scheifers et al"). These rejections, however, are respectfully traversed.

According to the present invention as recited in clarified amended claim 1, a by-product elimination device used in a power generation system is provided which comprises (a) a fuel pack provided with a fuel charged portion having a power generation fuel comprising a liquid or gas containing hydrogen charged therein; (b) a power generation module which is attachable/detachable from said fuel pack to receive said power generation fuel from said fuel charged portion, and which includes (i) a

reforming portion which transforms said power generation fuel supplied from said fuel charged portion into first gas containing hydrogen gas and carbon dioxide as main components, and (ii) a fuel cell which generates electrical energy by using the hydrogen gas contained in said first gas; and (c) an absorbent charged portion in said fuel pack which receives said first gas from said reforming portion, and which selectively absorbs carbon dioxide contained in said first gas fed from said reforming portion and feeds second gas whose carbon dioxide concentration is lower than a carbon dioxide concentration of said first gas to said fuel cell.

Similarly, new independent claim 24 recites, in particular, "an absorbent charged portion in said fuel pack, which selectively absorbs carbon dioxide received from said power generation module."

That is, according to the present invention as recited in clarified amended claim 1 and new claim 24, the absorbent charged portion is integrated into the fuel pack, instead of acting as a separate unit. And it is respectfully submitted that none of the cited references disclose, teach or suggest this feature of the present invention.

By contrast, Emelock discloses a CO₂ absorber 13 disposed between the formic acid 12 and the fuel cell 14. Similarly,

Matsushita discloses a modifier 2 and strippers 3 between the original fuel source and the fuel battery 1.

Scheifers et al, moreover, has merely been cited for the disclosure of a water trap.

And Clingerman et al has merely been cited for the disclosure of water gas shift, preferential oxidation, and vapor forming reactions.

It is respectfully submitted that none of Emelock, Matsushita, Scheifers et al and Clingerman et al disclose, teach or suggest the feature of the present invention as recited in clarified amended claim 1 and in new claim 24 whereby an absorbent charged portion is provided in the fuel pack.

Accordingly, it is respectfully submitted, that amended independent claim 1 and new independent claim 24, as well as claims 3 and 12-16 depending from claim 1, now also recite allowable subject matter, along with allowable claims 2 and 4-11 and allowed claims 19-23.

RE: Claims 17 and 18

It appears that the Examiner did not consider claims 17 and 18 on the merits. Nevertheless, it is respectfully submitted that claims 17 and 18 which depend from amended claim 1 also recite allowable subject matter.

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In view of the foregoing, entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,


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